

In the claims:

1. A storage processing device, comprising:

an input/output module including:

port processors to receive and transmit network traffic; and

a switch coupling said port processors; and

a control module coupled to said input/output module, said input/output module and said control module being configured to interactively support data migration.

2. The storage processing device of claim 1, wherein said port processors include table information related to data migration and wherein said control module is coupled to said table information to maintain said table information for data migration.

3. The storage processing device of claim 2, wherein said table information includes a barrier entry and said port processors delay data write operations if said barrier entry relates to said data write operation.

4. The storage processing device of claim 2, wherein said table information includes an entry related to the extents in the data snapshot, said entry defining an extent operation type.

5. The storage processing device of claim 4, wherein said table information further includes a legend entry for each extent operation type defining snapshot operations for the extent.

6. The storage processing device of claim 5, wherein said table information further includes entries referenced by said legend entry defining physical extent location.

7. The storage processing device of claim 6, wherein legend entries include entries indicating data not migrated, data migrated and a barrier entry for data being migrated.

8. The storage processing device of claim 7, wherein said port processors delay data write operations if said barrier entry relates to said data write operation.

9. The storage processing device of claim 8, wherein said control module provides commands to copy data and places said barrier entry for said data being copied.

10. A fabric for coupling at least one host and at least two storage devices, the fabric comprising:

at least one switch for coupling to the at least one host and the at least two storage devices; and

a storage processing device coupled to the at least one switch and for coupling to the at least one host and the at least two storage devices, the storage processing device including:

an input/output module including:

port processors to receive and transmit network traffic; and

a switch coupling said port processors; and

a control module coupled to said input/output module, said input/output module and said control module being configured to interactively support data migration.

11. The fabric of claim 10, wherein said port processors include table information related to data migration and wherein said control module is coupled to said table information to maintain said table information for data migration.

12. The fabric of claim 11, wherein said table information includes a barrier entry and said port processors delay data write operations if said barrier entry relates to said data write operation.

13. The fabric of claim 11, wherein said table information includes an entry related to the extents in the data snapshot, said entry defining an extent operation type.

14. The fabric of claim 13, wherein said table information further includes a legend entry for each extent operation type defining snapshot operations for the extent.

15. The fabric of claim 14, wherein said table information further includes entries referenced by said legend entry defining physical extent location.

16. The fabric of claim 15, wherein legend entries include entries indicating data not migrated, data migrated and a barrier entry for data being migrated.

17. The fabric of claim 16, wherein said port processors delay data write operations if said barrier entry relates to said data write operation.

18. The fabric of claim 17, wherein said control module provides commands to copy data and places said barrier entry for said data being copied.

19. A network comprising:

at least one host;

at least two storage devices; and

a fabric coupling the at least one host and the at least two storage devices, the fabric comprising:

at least one switch for coupling to the at least one host and the at least two storage devices; and

a storage processing device coupled to the at least one switch and for coupling to the at least one host and the at least two storage devices, the storage processing device including:

an input/output module including:

port processors to receive and transmit network traffic;

and

a switch coupling said port processors; and

a control module coupled to said input/output module, said input/output module and said control module being configured to interactively support data migration.

20. The network of claim 19, wherein said port processors include table information related to data migration and wherein said control module is coupled to said table information to maintain said table information for data migration.

21. The network of claim 20, wherein said table information includes a barrier entry and said port processors delay data write operations if said barrier entry relates to said data write operation.

22. The network of claim 20, wherein said table information includes an entry related to the extents in the data snapshot, said entry defining an extent operation type.

23. The network of claim 22, wherein said table information further includes a legend entry for each extent operation type defining snapshot operations for the extent.

24. The network of claim 23, wherein said table information further includes entries referenced by said legend entry defining physical extent location.

25. The network of claim 24, wherein legend entries include entries indicating data not migrated, data migrated and a barrier entry for data being migrated.

26. The network of claim 25, wherein said port processors delay data write operations if said barrier entry relates to said data write operation.

27. The network of claim 26, wherein said control module provides commands to copy data and places said barrier entry for said data being copied.

28. A method for supporting in data migration a storage processing device, comprising:

providing an input/output module including:

port processors receiving and transmitting network traffic; and

a switch coupling said port processors; and  
    providing a control module coupled to said input/output module, said input/output module and said control module being configured to interactively support data migration.

29. The method of claim 28, wherein said port processors include table information related to data migration and wherein said control module is coupled to said table information to maintain said table information for data migration.

30. The method of claim 29, wherein said table information includes a barrier entry and said port processors delay data write operations if said barrier entry relates to said data write operation.

31. The method of claim 29, wherein said table information includes an entry related to the extents in the data snapshot, said entry defining an extent operation type.

32. The method of claim 31, wherein said table information further includes a legend entry for each extent operation type defining snapshot operations for the extent.

33. The method of claim 32, wherein said table information further includes entries referenced by said legend entry defining physical extent location.

34. The method of claim 33, wherein legend entries include entries indicating data not migrated, data migrated and a barrier entry for data being migrated.

35. The method of claim 34, wherein said port processors delay data write operations if said barrier entry relates to said data write operation.

36. The method of claim 35, wherein said control module provides commands to copy data and places said barrier entry for said data being copied.